National Institute of Environmental Health Sciences

# Lyme borreliosis in Europe

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**Abstract:**

Despite improvements in prevention, diagnosis and treatment, Lyme borreliosis (LB) is still the most common arthropod-borne disease in temperate regions of the northern hemisphere, with risk of infection associated with occupation (e.g. forestry work) and certain outdoor recreational activities (e.g. mushroom collecting). In Europe, LB is caused by infection with one or more pathogenic European genospecies of the spirochaete Borrelia burgdorferi sensu lato, mainly transmitted by the tick Ixodes ricinus. Recent surveys show that the overall prevalence of Lb may be stabilising, but its geographical distribution is increasing. In addition, much remains to be discovered about the factors affecting genospecific prevalence, transmission and virulence, although avoidance of tick bite still appears to be the most efficient preventive measure. Uniform, European-wide surveillance programmes (particularly on a local scale) and standardisation of diagnostic tests and treatments are still urgently needed, especially in the light of climate change scenarios and land-use and socio-economic changes. Improved epidemiological knowledge will also aid development of more accurate risk prediction models for LB. Studies on the effects of biodiversity loss and ecosystem changes on Lb emergence may identify new paradigms for the prevention and control of LB and other tick-borne diseases.

**Source:** http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19906

## Resource Description

**Communication:**

resource focus on research or methods on how to communicate or frame issues on climate change; surveys of attitudes, knowledge, beliefs about climate change

A focus of content

**Communication Audience:**

audience to whom the resource is directed

Health Professional

**Exposure :**

weather or climate related pathway by which climate change affects health

Ecosystem Changes

**Geographic Feature:** ☑

resource focuses on specific type of geography

Other Geographical Feature

**Other Geographical Feature :** Forest

**Geographic Location:** ☑

resource focuses on specific location

Non-United States

**Non-United States:** Europe

**Health Impact:** ☑

specification of health effect or disease related to climate change exposure

Infectious Disease

**Infectious Disease:** Vectorborne Disease

**Vectorborne Disease:** Tick-borne Disease

**Tick-borne Disease:** Lyme Disease

**Intervention:** ☑

strategy to prepare for or reduce the impact of climate change on health

A focus of content

**Mitigation/Adaptation:** ☑

mitigation or adaptation strategy is a focus of resource

Adaptation

**Model/Methodology:** ☑

type of model used or methodology development is a focus of resource

Methodology

**Population of Concern:** A focus of content

**Population of Concern:** ☑

populations at particular risk or vulnerability to climate change impacts

Workers

**Resource Type:** ☑

format or standard characteristic of resource

Review

**Timescale:** ☑

time period studied

Time Scale Unspecified

**Vulnerability/Impact Assessment:** ☑

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content